

NPDES Compliance Evaluation Inspection (CEI) Report

Facility Name and Location		Entry Date	Entry Time
San Francisco International Airport, Mel Leong Treatment Plants (Sanitary and Industrial Wastewater Treatment Plants) Bldg. 924 Clearwater Drive San Francisco, California 94128		October 1, 2015	8:00 a.m.
		Permit Effective Date	Permit Expiration Date
		July 1, 2013	June 30, 2018
Mailing Address	Same as facility location? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Notified?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
City and County of San Francisco and North Bayside System Unit Mel Leong Treatment Plant San Francisco International Airport Commission P.O. Box 8097 682 North McDonnell Road San Francisco, CA 94128		If no, rationale:	
CIWQS Inspection ID	22368584	Receiving Water Name	Lower San Francisco Bay
NPDES Permit Number	CA0038318	County	San Mateo
Order Number	R2-2013-0011	Plant Classification	Major
Type of Discharge	Secondary treated sanitary wastewater, treated industrial wastewater, and stormwater runoff	CIWQS Place ID	256506 (Industrial) and 256507 (Sanitary)
Names and Titles of Onsite Representatives			
Name	Title	Phone	Email
Russell Ng	Plant Superintendent	(650) 821-5400	russell.ng@flysfso.com
Sheila Calabro	Chief of Operations	(650) 821-8350	sheila.calabro@flysfso.com
William Zolan	Supervising Chemist	(650) 821-8359	bill.zolan@flysfso.com
Kris Nipple	Officer, Bay Pollution Prevention Program	(650) 821-8357	kris.nipple@flysfso.com
Name and Title of Responsible Official			
Name	Peter Acton		
Title	Director of Facilities Division & Building Official		
Phone	(650) 821-5400		
Email	peter.acton@flysfso.com		
Does responsible official match permit based contact information on file?			Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Does grade level comply with plant classification?			Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Inspector Information	Presented Credentials?		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Organization Name	San Francisco Bay Regional Water Quality Control Board		
Title	Jessica Watkins		
Phone	(510) 622-2349		
Email	jessica.watkins@waterboards.ca.gov		

I. PRE-INSPECTION PERMIT REVIEW

Is the facility as described in the permit?	Yes	No	N/A
Has the Water Board been notified of any process/production modifications?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Was a permit reissuance application submitted to the Water Board on time?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Was the permit modified prior to any facility or discharge changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discharge Points			
001-San—Lower San Francisco Bay (Secondary treated sanitary wastewater)			
001-Ind—Lower San Francisco Bay (Treated industrial wastewater and stormwater runoff)			
001—Lower San Francisco Bay (Combined treated sanitary and industrial wastewater and stormwater runoff)			
002—Lower San Francisco Bay (Dechlorinated treated sanitary and industrial wastewater and stormwater runoff)			
003—Lower San Francisco Bay (Stormwater runoff)			
004—Lower San Francisco Bay (Stormwater runoff)			
005—Lower San Francisco Bay (Stormwater runoff)			
006—Lower San Francisco Bay (Stormwater runoff)			
007—Lower San Francisco Bay (Stormwater runoff)			
008—Lower San Francisco Bay (Stormwater runoff)			
009—Lower San Francisco Bay (Stormwater runoff)			
010—Lower San Francisco Bay (Stormwater runoff)			
013—Lower San Francisco Bay (Stormwater runoff)			
Facility Class	III		
Chief Plant Operator	Russell Ng	Grade	V
Current ADWF	0.6 MGD (Sanitary Plant); 0.4 MGD (Industrial Plant)		
Permitted ADWF	2.2 MGD (Sanitary Plant); 1.2 MGD (Industrial Plant)		
Current BOD load	Not applicable		
Permitted BOD load	Not applicable		
Current TSS load	Not applicable		
Permitted TSS load	Not applicable		
Are current loads less than 80% of design loads?	Yes	No	N/A
If no, does annual report describe timing of next plant expansion?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Permitting concerns that might affect inspection process			
None. The Sanitary Plant has sequential batch reactors with a design capacity of 2.2 MGD; however, the State Water Board currently classifies the plant as a Class III facility.			

II. PRE-INSPECTION MONITORING REPORT REVIEW

Summary of effluent limit violations since last inspection (May 1, 2014)			
Constituent	No. of Violations	Corrective Action Reported	
<i>Industrial Plant</i>			
Biochemical Oxygen Demand (5-day at 20°C) (BOD ₅) Percent Removal	1	The Discharger increased preventive maintenance of airport terminal restaurant grease traps and sanitary collection system trouble areas and added "COD measurements of sanitary and IW waste stream samples ... to correct BOD dilution series as needed."	
<i>Sanitary Plant</i>			
Total Suspended Solids (TSS) Monthly Average	2	<u>August and September 2014 Plant Upset</u> The Discharger repaired the broken mix feed line in SBR No. 3, installed flushing valves on the end of all SBR mix feed lines to keep the lines clear and prevent bursting, and increased routine preventative maintenance frequency.	
TSS Weekly Average	4	<u>March 2015 Plant Upset</u> Numerous corrective actions are summarized in the March 2015 SMR cover letter, including adjusting operational parameters and reseeded with return activated sludge from SFPUC's Southeast Plant.	
Summary of receiving water violations since last inspection (May 1, 2014)			
Parameter	No. of Violations	No action reported	
Dissolved oxygen	None	<input type="checkbox"/>	
Turbidity	None	<input type="checkbox"/>	
pH	None	<input type="checkbox"/>	
Temperature	None	<input type="checkbox"/>	
Aesthetic issues (e.g., excessive algae, bottom deposits, etc.)	None	<input type="checkbox"/>	
Notes			
The Discharger participates in the Regional Monitoring Program (RMP) in lieu of receiving water monitoring. This involves collection of data on pollutants and toxicity in San Francisco Bay water, sediment, and biota.			
Monitoring and Reporting Program observations since last inspection (May 1, 2014)			
	Yes	No	N/A
Responsible person signs and certifies the DMRs and/or SMRs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Discharger monitors at frequency required by permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All data collected are summarized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coliform concentrations are calculated as required by permit (median, mean, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detection limits are reported	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
"Less than" and estimated values are properly carried through the calculations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Data reported in time frame and frequency required by permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Notes			
The Discharger calculates the geometric mean with the minimum detection level (MDL) for non-detect results.			
Have any spills/bypasses been reported to the Regional Board?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dates and times of spills/bypasses			
An unauthorized discharge began at approximately 7:30 a.m. on December 19, 2014, and lasted approximately 85 hours due to an industrial wastewater treatment plant force main failure in the West Field Detention Basin drainage area. The Discharger estimates that approximately 102,000 gallons of untreated industrial wastewater was released and an unknown volume was discharged to the Bay through Discharge Point No. 004. The Discharger took pump stations offline to detain flows as weather permitted, but allowed discharge to the Bay to prevent flooding. The Discharger intends to completely replace the force main; it had originally planned to complete this project by summer of 2015.			

III. Site-Inspection Planning Checklist

Personal Safety Gear and Inspection Tools			
	Yes	No	N/A
Hard hat	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Safety vest	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Safety goggles/glasses	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Steel-toed boots	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hearing protection	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Writing Implements	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Camera	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Global positioning device	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Spare batteries	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Concerns based on review of records, reports, and other documents, and inspection objectives			
None.			

IV. RECORDS AND REPORTS REVIEW

	Required onsite?		Available onsite?			Not Inspected	Comments
	Yes	No	Yes	No	N/A		
Current NPDES permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	R2-2013-0011
Permit modifications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Permit amendments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Compliance orders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Monitoring and reporting program	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	R2-2013-0011, Attachment E
Standard provisions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	R2-2013-0011, Attachments D and G
Industrial pretreatment program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Maintenance records and log book	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Plant operation and maintenance manual	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Equipment manuals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Plant engineering drawings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Collection system drawings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Maintenance records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Spill and bypass records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Biosolids disposal plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Biosolids farm map and disposal agreements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Soil nutrient analyses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Biosolids loading rate records	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Pollution prevention plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Pathogen/vector reduction records	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Spill prevention control and countermeasure (SPCC) plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Operational logs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Auxiliary power check logs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Notes							

V. OPERATIONS AND MAINTENANCE REVIEW

		Yes	No	N/A	Not Inspected
Were all records and reports required by permit organized and available?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Was influent flow meter calibration available onsite?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date of last calibration	May 6, 2015				
Calibration performed by...	D. Rinck				
Was effluent flow meter calibration available onsite?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date of last calibration	May 6, 2015				
Calibration performed by...	D. Rinck				
Were flow measurement records maintained for past 3 years?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is a maintenance management program in place?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Number of open work orders	~450				
Oldest date of open work order	May 2015				
Are entries to the operational logs made in pen?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Were all operational log entry modifications made with suitable cause?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Were reported spills and bypasses recorded in operational logs?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is the facility staffing requirement described in O&M manual?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is the facility staffed in accordance with O&M manual?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Were there auxiliary power check logs?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Air Board permit number	Not inspected.				
Notes					
(1) There were a couple work orders with dates in 2013; however, the Discharger stated these were likely errors. (2) The facility is short-staffed with approximately 3 to 4 vacancies out of 30 positions.					

VI. MONITORING RECORDS REVIEW

Are monitoring records and laboratory reports retained in accordance with Attachment D (5 years if related to sewage sludge and biosolids use and disposal; 3 years if related to anything else)?		Yes	No	N/A	Not Inspected
		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Are data reported on DMRs/SMRs consistent with analytical results?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is the onsite laboratory ELAP certified?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Certification Number	1705				
Expiration Date	January 31, 2016				
Parameters measured onsite				N/A	Not Inspected
				<input type="checkbox"/>	<input type="checkbox"/>
1. pH	8. Biochemical Oxygen Demand (BOD)	15. Chemical Oxygen Demand			
2. Turbidity	9. Carbonaceous BOD	16. Chlorine			
3. Conductivity	10. Ammonia	17. Settleable Residue			
4. Dissolved Oxygen	11. Nitrite	18. Whole Effluent Toxicity, Fathead Minnow (<i>P. promelas</i>)			
5. Non-filterable Residue (TSS)	12. Nitrate-nitrite				
6. Hardness	13. Oil and Grease				
7. Fecal Coliform	14. Alkalinity				
Additional parameters used for internal monitoring and process control				<input type="checkbox"/>	<input checked="" type="checkbox"/>
Constituents analyzed with hand-held equipment				<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Most recent calibration date	Standard expiration date		
1.					
2.					
3.					
4.					
Notes					

VII. MONITORING REPORT REVIEW

	Yes	No	N/A	Not Inspected
Are loading calculations prepared correctly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are contract laboratory records and chains of custody available?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do sampling and analytical records include:				
a. Dates, times, and locations of sampling	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Names of individuals performing sampling	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Analytical methods	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Results of analyses	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Dates of analyses	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Times of analyses, as necessary to verify holding times	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Analysts names or initials	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Instantaneous flow at grab sample locations, if required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
MONITORING PROCEDURES				
Are adequate equipment and procedures used for onsite analyses?				
pH	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Dissolved oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Temperature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Turbidity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
UV transmittance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is refrigeration satisfactory?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are grab samples collected during representative discharge conditions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Do monitoring locations appear to be appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do composite sampling procedures comply with the permit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are automatic samplers properly cleaned and maintained?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are samples adequately preserved?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are sample containers appropriate for the samples collected?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are samples collected using appropriate protocols?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are coliform samples collected directly into sterile containers?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does coliform sampling occur after the last introduction of wastes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is the number of discharge points as described in the permit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are the locations of the discharge outfalls as described in the permit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the name of the receiving water as described in the permit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is site free of any evidence of spills or bypasses?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do the sampling and monitoring appear representative of the discharge?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are groundwater monitoring wells capped and locked?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Notes				

VIII. FINAL EFFLUENT AND RECEIVING WATER MONITORING

		Yes	No	Not Inspected	
APPEARANCE OF SANITARY PLANT FINAL EFFLUENT					
Condition during the inspection					
Clear (not cloudy)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Colorless		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Free of sheen		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Free of scum		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Free of foam		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other		<input type="checkbox"/>	<input type="checkbox"/>		
Notes					
APPEARANCE OF INDUSTRIAL PLANT FINAL EFFLUENT					
Condition during the inspection					
Clear (not cloudy)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Colorless		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Free of sheen		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Free of scum		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Free of foam		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other		<input type="checkbox"/>	<input type="checkbox"/>		
Notes					
APPEARANCE OF RECEIVING WATER		Yes	No	Upstream condition is similar	Not Inspected
Condition during the inspection					
Free of distinctly visible plume		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Free of foam and sheen		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Free of snails		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Free of erosion at the discharge point		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Free of bottom deposits		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Free of filamentous algae growth		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Free of microbial layers on aquatic plants		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Notes					
The facility discharges from the NBSU joint force main 5,300 feet offshore through a submerged diffuser; therefore, the receiving water in the vicinity of the discharge point was not observed.					

IX. SITE WALK INSPECTION OF INDUSTRIAL PLANT

Weather and site conditions present during time of inspection							
Partly cloudy							
Treatment Process (described in permit)	Appeared Compliant	Not Present	Non- Operational	Lacking Maintenance	Not Inspected		
1. Flow equalization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2. Flocculation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
3. Dissolved air floatation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
4. pH adjustment (as needed)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
5. Trickling filter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
6. Final clarification	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
7. Chlorination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
8. Sludge drying beds	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Notes							
Chlorinated wastewater from both plants is combined at a pumping station and discharged to the NBSU pipeline where it is transported to the South San Francisco and San Bruno Water Quality Control Plant for dechlorination prior to discharge to Lower San Francisco Bay.							
EMERGENCY OPERATION				Yes	No	N/A	Not Inspected
Is available back-up power appropriate for emergency conditions?				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are there alarms systems for power and equipment failure?				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are treatment control procedures established for emergencies?				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Notes							
Regional Water Board staff observed that the dissolved air floatation (DAF) treatment units are severely corroded (see Photo A-5). Inspections conducted on March 5, 2008 (see Photo D-1); February 25, 2009 (see Photo D-2); and February 10, 2010 (see Photo D-3), also document corrosion. During the inspection, Discharger staff explained that the DAF treatment units are scheduled to be replaced during future industrial wastewater treatment plant upgrades estimated to take place in the next two to four years.							

X. SITE WALK INSPECTION OF SANITARY PLANT

Weather and site conditions present during time of inspection							
Partly cloudy							
Treatment Process (described in permit)	Appeared Compliant	Not Present	Non- Operational	Lacking Maintenance	Not Inspected		
1. Bar screening	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2. Grit removal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
3. Influent flow equalization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
4. Sequential batch reactors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
5. Effluent flow equalization	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
6. Chlorination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
7. Gravity belt thickener	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
8. Anaerobic digestion	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
9. Sludge drying beds	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
10. Belt filter press	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Notes							
Chlorinated wastewater from both plants is combined at a pumping station and discharged to the NBSU pipeline where it is transported to the South San Francisco and San Bruno Water Quality Control Plant for dechlorination prior to discharge to Lower San Francisco Bay.							
EMERGENCY OPERATION				Yes	No	N/A	Not Inspected
Is available back-up power appropriate for emergency conditions?				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are there alarms systems for power and equipment failure?				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are treatment control procedures established for emergencies?				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Notes							
<p>(1) Regional Water Board staff observed that the temporary force main installed after the force main collapse on December 16, 2007, is still in place (see Photo B-1). During the inspection and a follow-up telephone call on November 19, 2015, we learned that the design of the temporary force main causes the bar screen approach velocity to exceed the design standard, allowing large debris (e.g., rags) to pass through the bar screens. According to Metcalf & Eddy, mechanically-cleaned bar screen approach velocities should not exceed 3 feet per second to prevent entrained solids from being forced through the bars (<i>Wastewater Engineering: Collection, Treatment, Disposal</i>, 1972). According to Discharger staff, this has caused operational issues for the last two years. The temporary force main is scheduled to be replaced during future industrial wastewater treatment plant upgrades.</p> <p>(2) During the inspection, Discharger staff explained that one of the three SBRs may be temporarily used as an equalization tank during future industrial wastewater treatment plant upgrades. It is unclear what this means in terms of the need for routine preventative maintenance and the potential for upset. Recent upsets (August and September 2014, and March 2015) resulted in effluent limitation violations. Moreover, a black toxic petroleum-based material entered the plant on August 11, 2014. Since the 2014 upset, SBRs have been switched out every six months for routine preventative maintenance.</p>							

XI. SITE WALK OPERATION AND MAINTENANCE INSPECTION

	Yes	No	N/A	Not Inspected
Maintenance program appears to be in place and being followed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lift stations appear properly maintained and have back-up power	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Odors are adequately controlled, including...	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ponds	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Headworks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sludge processing facilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Storage appears to control leachate and runoff	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public access to storage is prevented	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No safety concerns were observed that might interfere with proper O&M or monitoring	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flow devices appear to be property installed and maintained, and operating without interference	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Notes				
Stormwater handling description				
Stormwater is collected into four detention basins to collect the first flush for pumping to the industrial wastewater treatment plant for treatment. Once the detention capacity is reached, the remainder is pumped to nine outfalls and discharged into San Francisco Bay.				

ATTACHMENTS

Compliance Evaluation Inspection Photographs

October 1, 2015

San Francisco International Airport
Mel Leong Treatment Plants
Bldg. 924 Clearwater Drive
San Francisco, California 94128

Contents

Attachment A – Industrial Wastewater Treatment Plant Photographs A-1
Attachment B – Sanitary Wastewater Treatment Plant Photographs B-1
Attachment C – Stormwater Photographs..... C-1
Attachment D – Prior Inspection Photographs D-1



Photo A-1: Flow equalization tank.

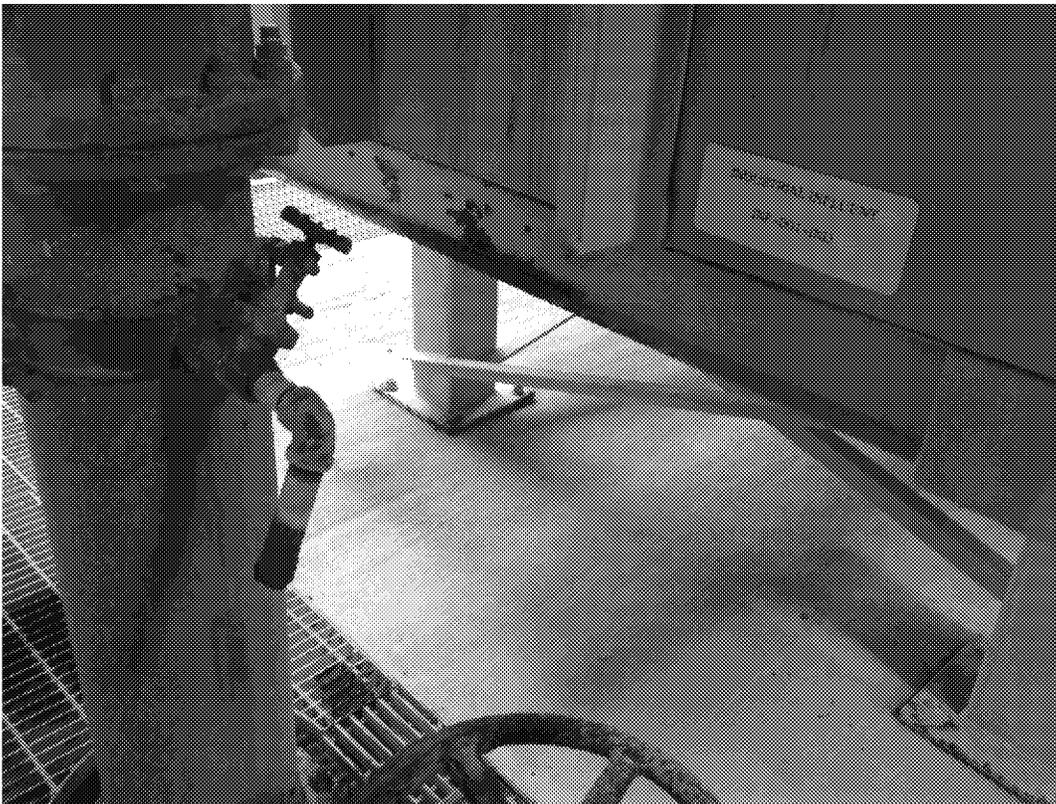


Photo A-2: Industrial Plant influent sampling location INF-001-IND.



Photo A-3: Rapid Mix Basin No. 1.

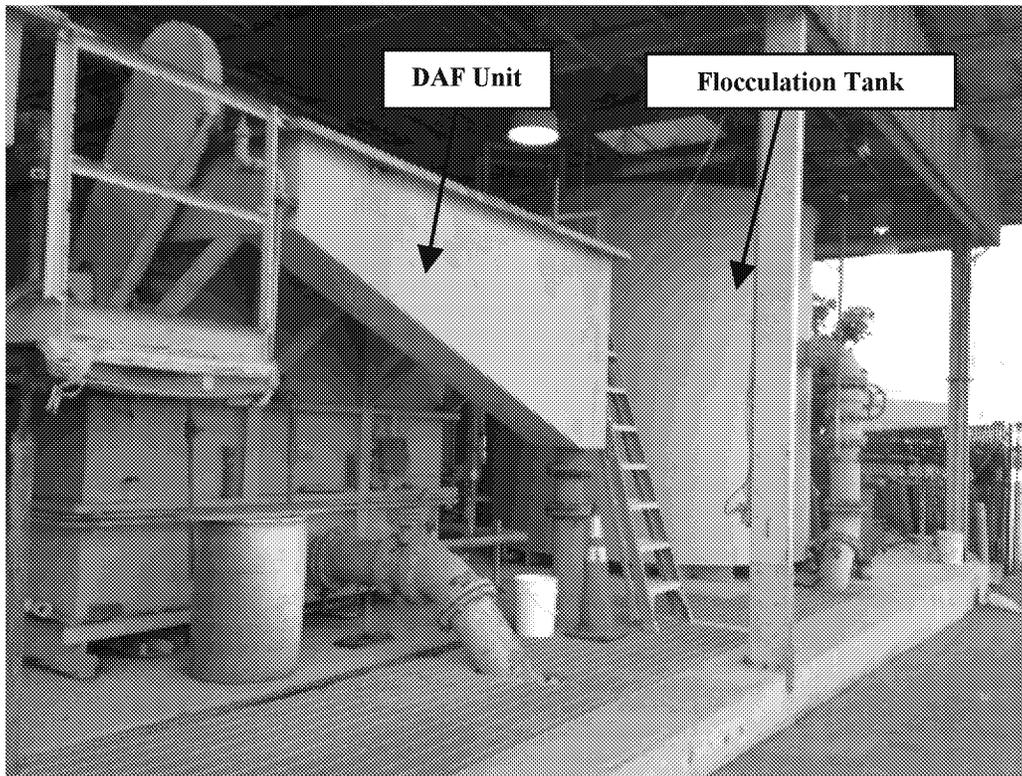


Photo A-4: Flocculation tank and one of two dissolved air flotation (DAF) units.



Photo A-5: Close-up view of severely corroded DAF unit.



Photo A-6: Rapid Mix Basin No. 2.



Photo A-7: Trickling filter.

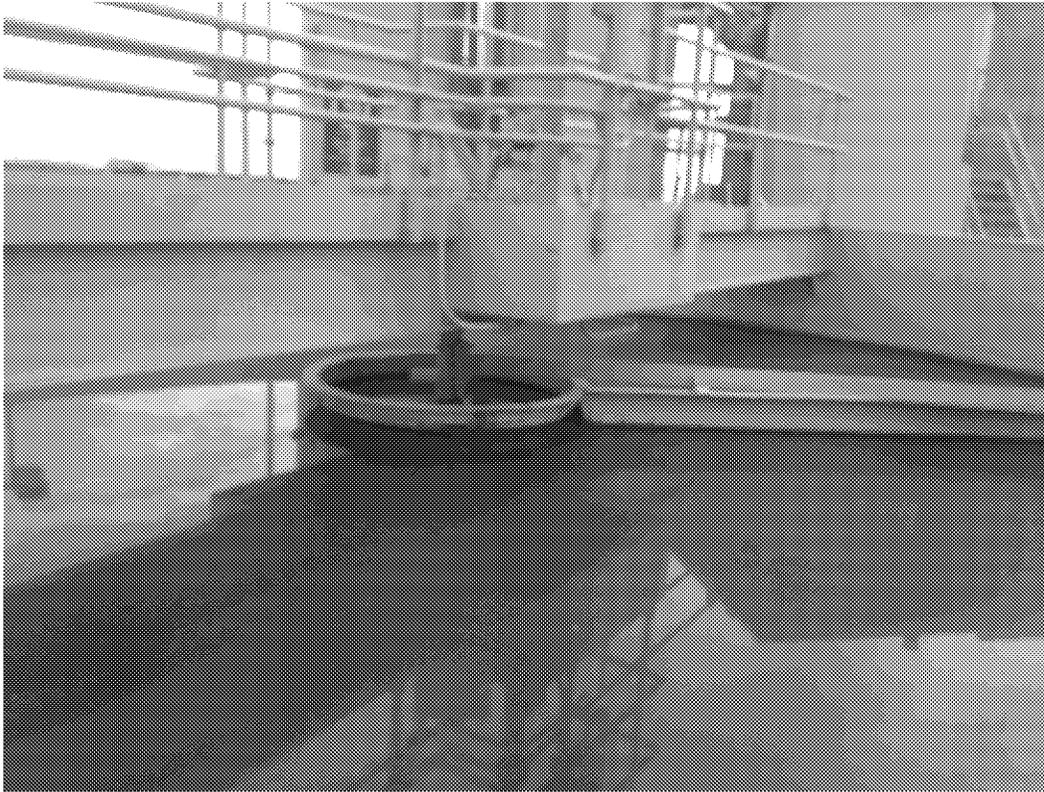


Photo A-8: One of two final clarifiers.



Photo A-9: Chlorine contact basin.



Photo A-10: Water reclamation system (1,500 to 2,000 gallons recycled water used per day).

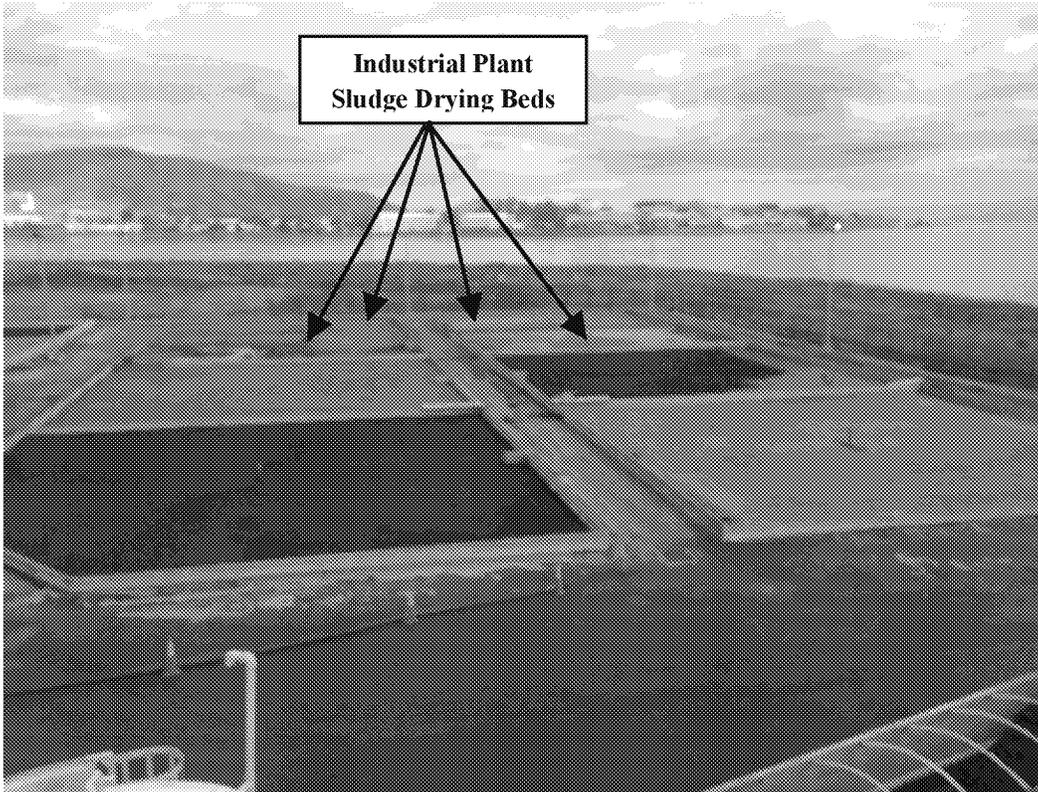


Photo A-11: Industrial Plant sludge drying beds.



Photo B-1: Temporary Sanitary Plant force main installed due to force main collapse in 2007.



Photo B-2: Preliminary treatment.



Photo B-3: One of two influent flow equalization basins (southeastern FEB).

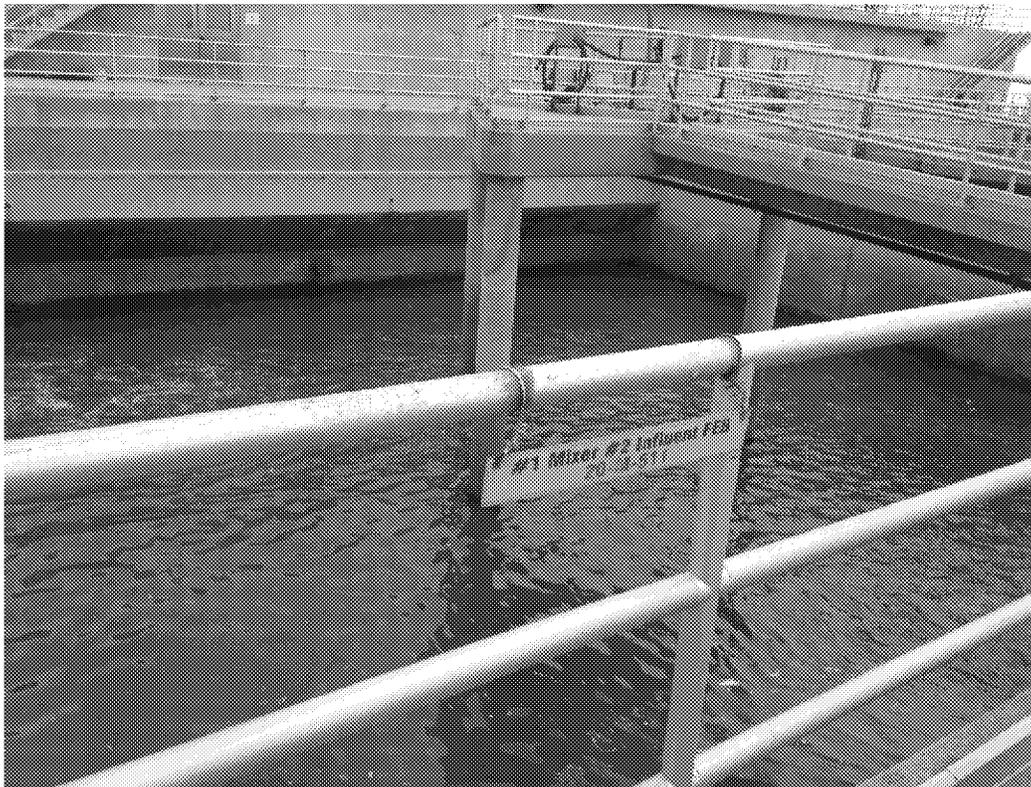


Photo B-4: One of two influent flow equalization basins (northwestern FEB).



Photo B-5: Effluent flow equalization basin (left) and influent flow equalization basin (right).



Photo B-6: WAS holding tank.



Photo B-7: Chlorine contact channel.



Photo B-8: Final effluent sampling point.



Photo B-9: Sequential batch reactor (SBR) No. 1.



Photo B-10: SBR No. 2.



Photo B-11: SBR No. 3.



Photo B-12: Gravity belt thickeners.



Photo B-13: One of two anaerobic digesters.

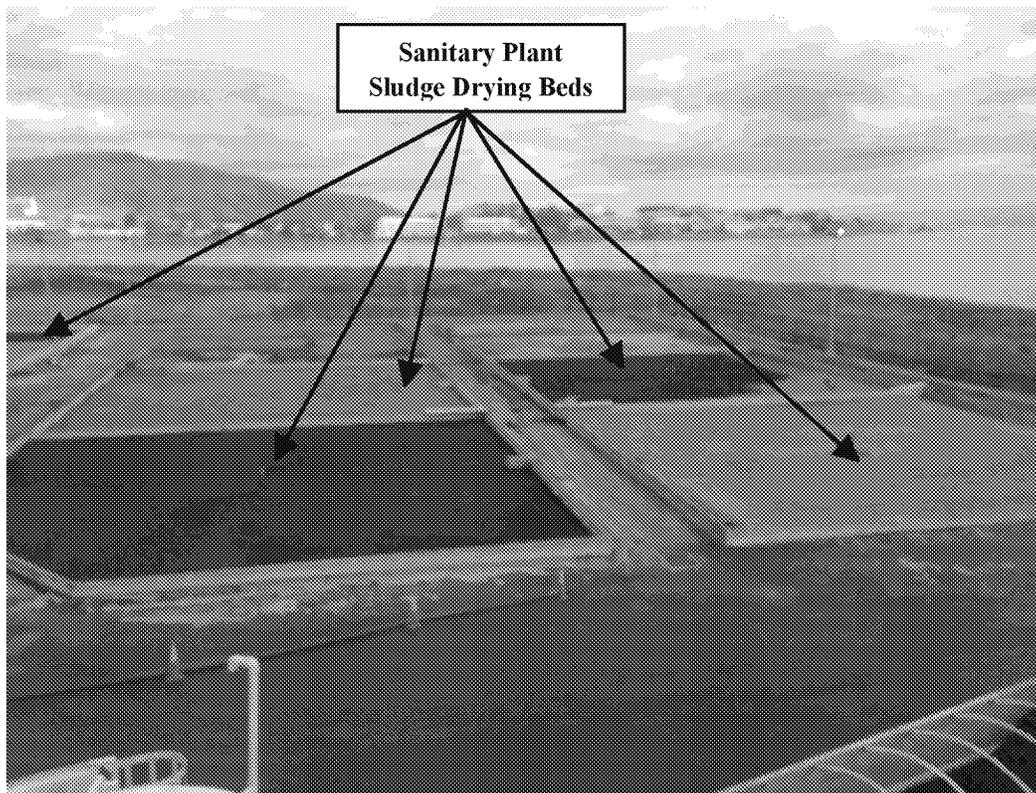


Photo B-14: Sanitary Plant sludge drying beds.

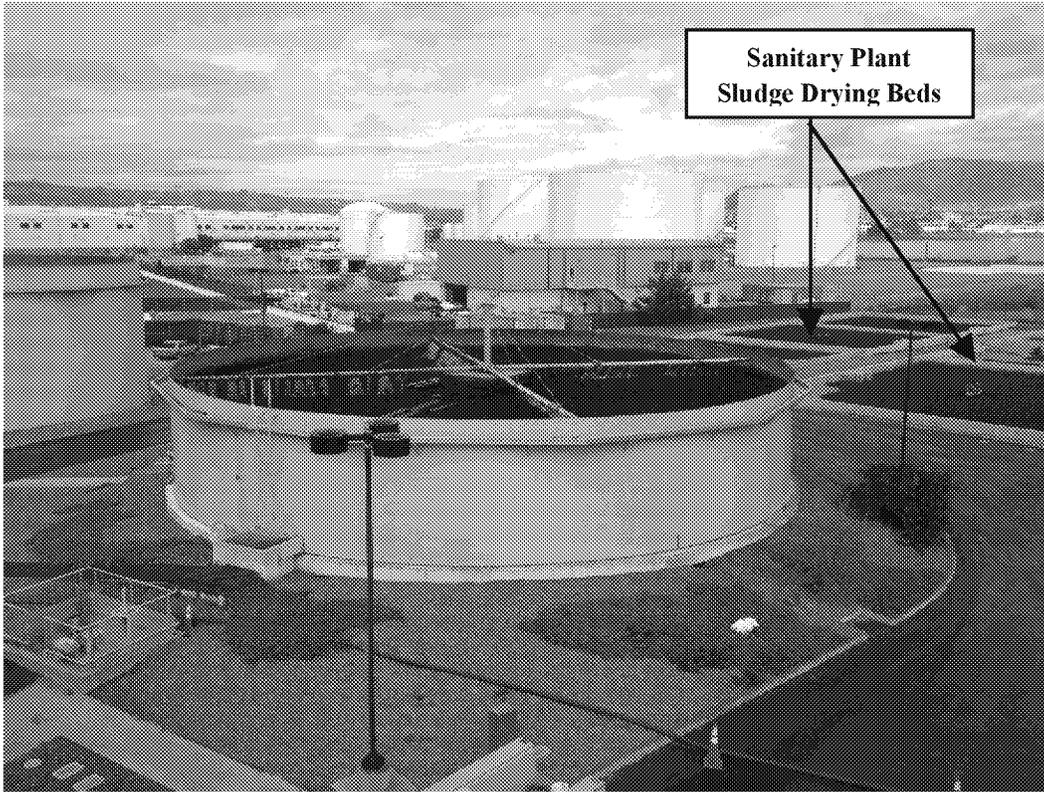


Photo B-15: Sanitary Plant sludge drying beds (Industrial Plant trickling filter in foreground).



Photo B-16: Close-up view of Sanitary Plant sludge drying bed being filled.



Photo C-1: Stormwater Discharge Point No. 003.



Photo C-2: South Field Detention Basin west of Discharge Point No. 003.

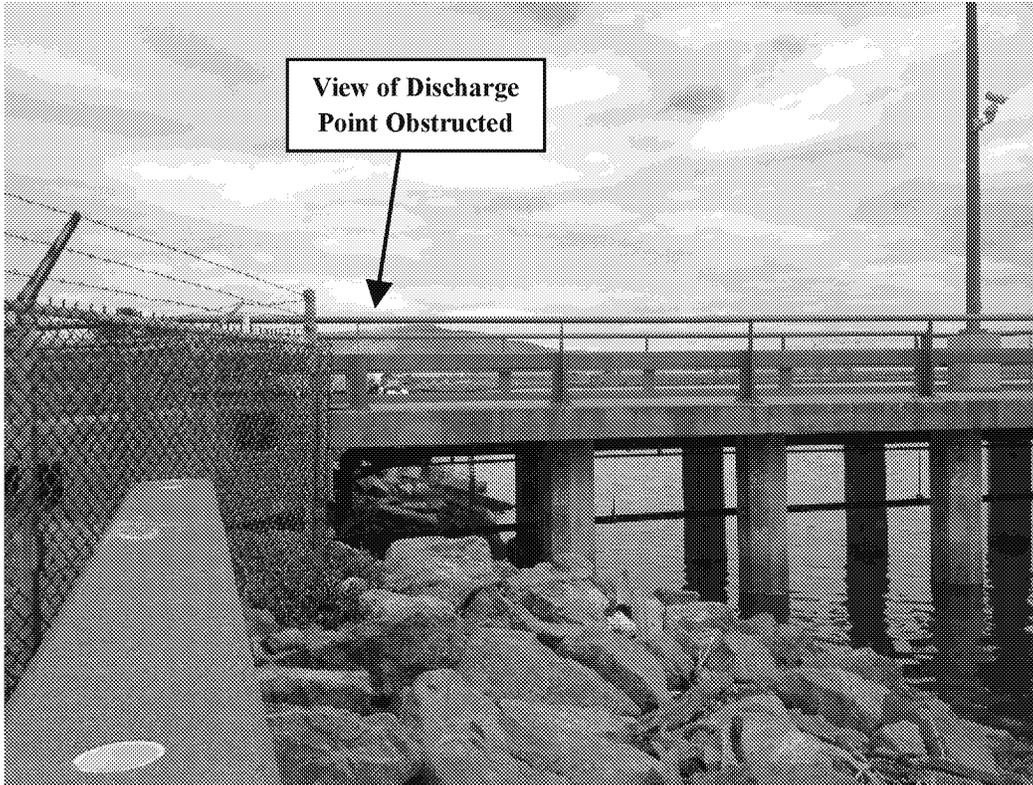


Photo C-3: Stormwater Discharge Point No. 004.



Photo C-4: Stormwater Discharge Point No. 005.



Photo C-5: Stormwater Discharge Point No. 006.

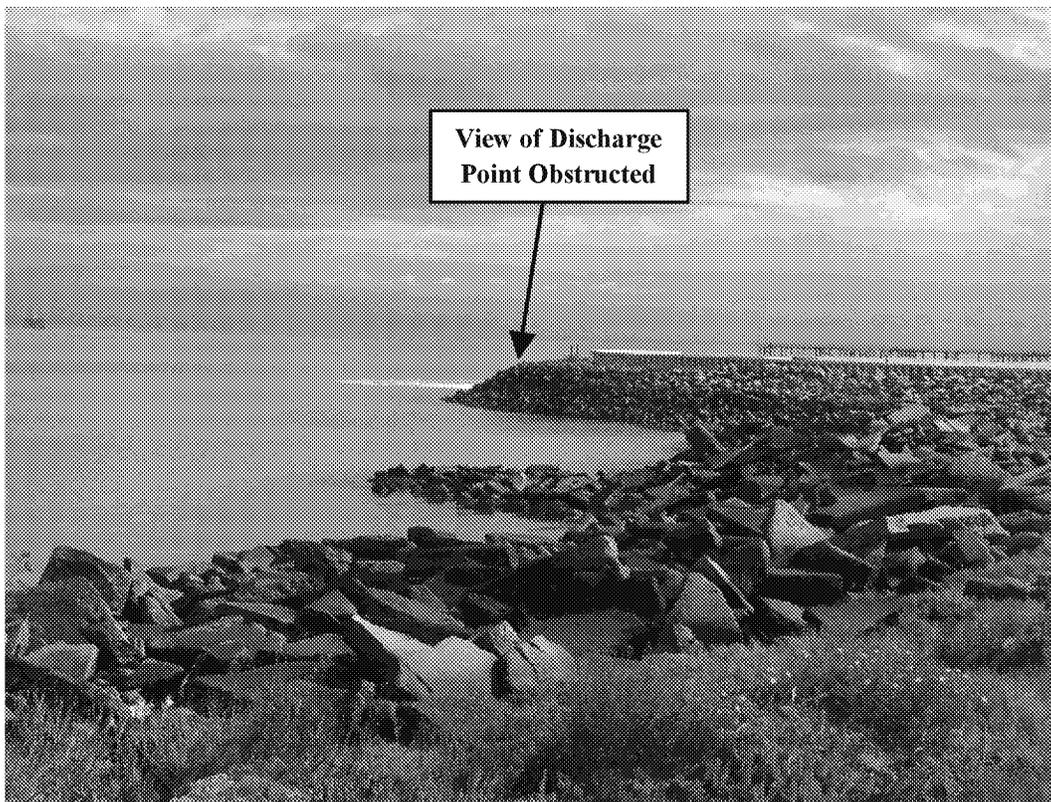


Photo C-6: Stormwater Discharge Point No. 007 seen discharging from the north.



Photo C-7: Stormwater Discharge Point No. 007 (no longer discharging).



Photo C-8: Stormwater Discharge Point No. 008.



Photo C-9: Stormwater Discharge Point No. 009.



Photo C-10: Stormwater Discharge Point No. 010.



Photo C-11: Stormwater Discharge Point No. 013.



Photo D-1: Corrosion of DAF treatment units observed during the March 5, 2008, inspection.



Photo D-2: Corrosion of DAF treatment units observed during the February 25, 2009, inspection.

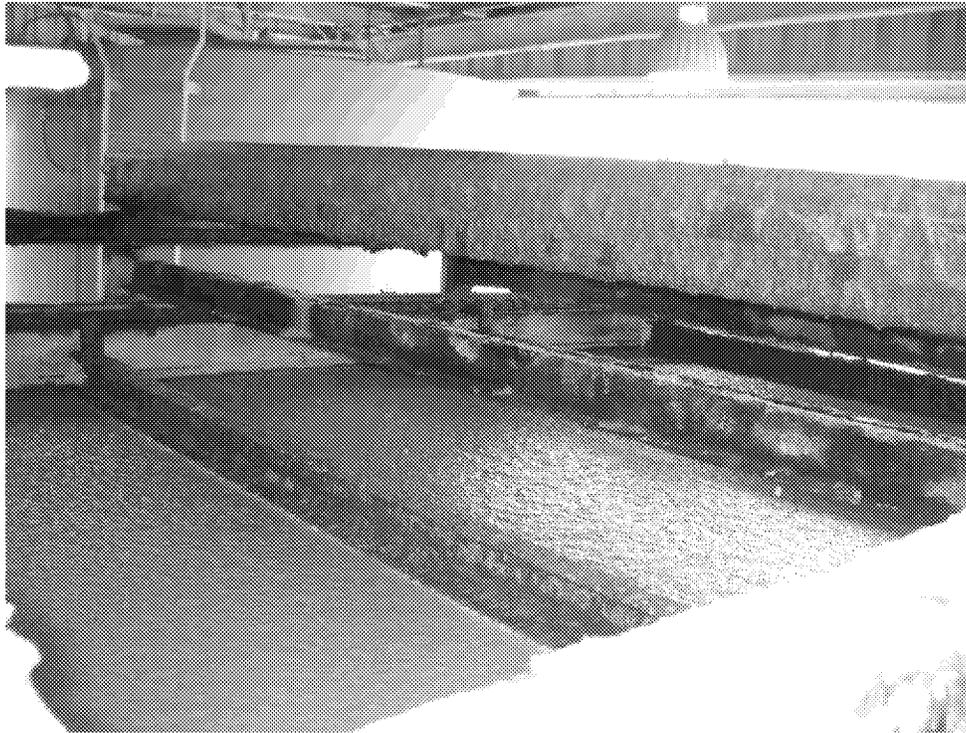


Photo D-3: Corrosion of DAF treatment units observed during the February 10, 2010, inspection.